

LESSON 2C—NARRATIVE 1: HOW DID HUMANS ARRIVE IN NORTH AMERICA?

Think about your family's move to Montana. Someone in your family moved here from another part of our country, or even another part of our world. The move, or **migration**, may have happened recently, or it may have taken place years ago. If your family's journey happened in the last few decades, they more than likely traveled to Montana by motorized vehicle. If the migration took place earlier, your ancestors may have traveled to Montana by train, by covered wagon, or even on foot. All of the families of the people who live in the land we call Montana **immigrated** here—traveled here from another area—at some time in the past.

Montana's historical archaeologists are interested in the lifeways of people who migrated to our state during the eighteenth and nineteenth centuries. Many written records exist that help us study the historical past. Meriwether Lewis and William Clark kept detailed journals when they explored this land in the early nineteenth century. Other early explorers have left us **primary documents**, or first-hand written accounts, of their travels. Historic immigrants explored the land, trapped animals for fur, traded with the American Indians who were already here, and mined for precious minerals. Others who moved to Montana ranched, homesteaded, and worked industrial jobs. You, too, are a part of Montana's continuing history.

The prehistoric **era**, or time, intrigues many archaeologists. The

Archaeologists believe humans originated in the Old World and migrated to the New World.

artifacts of ancient people provide clues that help us study those who moved to and lived here long before European immigrants arrived. Discoveries of artifacts crafted by humans guide archaeologists to develop theories about the ancient lifeways in Montana. By studying artifacts and other evidence, archaeologists can reconstruct the dates of arrival, travel routes, and daily life of the prehistoric people who lived here. The majority of archaeologists believe that the first people arrived in Montana at least 12,000 years ago. Other archaeologists believe the people arrived thousands of years earlier. And some Native Americans believe that their ancestors were created here and have always lived in this land. Future research and fieldwork may change our ideas about this question.

Anthropology is the science that studies the origin, development, and culture of people. Some anthropologists study human skeletons to determine our physical origins and the changes in ancient people. Other anthropologists study social customs and beliefs. On the basis of their studies, anthropologists have concluded that humans have adapted, or changed, through time. According to this view, humans have evolved, just as plants and animals have. This theory is challenged by people outside the scientific community who have other beliefs about the origins of humans.

According to current scientific

research, the earliest people lived in Africa, or possibly Asia, over two million years ago. As environmental conditions shifted, people adapted to the changes. Their ability to walk in an upright position, and the use of early stone tools, helped them survive the challenges of daily life. The human ability to think and plan ahead also made it possible for them to survive. As time progressed, the tools humans made of stone became more refined and sophisticated. The human ability to use fire for protection and cooking represented yet another advancement. Anthropologists believe that human intelligence—which allows people to subsist through dangers and difficulties—separates humans from other species of mammals.

Anthropologists have developed a timeline that represents the changes and adaptations that have occurred in human development. The most recent human expansion came around 200,000 years ago when contemporary, or modern, humans evolved. This species, our species, is known as **Homo sapiens**. *Homo* and *sapiens* are Latin words meaning “man” and “wise.” Discoveries in Europe, Asia, and Africa currently suggest that *Homo Sapiens* evolved in the Old World and later migrated to the New World.

You may have heard of the ancient times referred to as the **Stone Age**. People made tools out of stone during this period. Metal tools were not invented yet. The terms **Paleolithic**, **Mesolithic**, and **Neolithic** describe the old, middle, and new stone ages as they occurred in the Old World. *Lithic* (from the Greek word *lithos*) means

“stone.” The Paleolithic covers the greatest number of years, stretching from approximately two million years ago to about ten thousand years ago. Few technological changes took place during the old stone age. The Mesolithic and Neolithic were of shorter duration, and advancements in technology progressed more rapidly. These periods came after the last Ice Age. Each age’s length varied, depending upon the location of a culture in the world. Old Stone Age people were intelligent **hunters and gatherers**. They followed animal herds to obtain food, and they migrated with the seasons to harvest plants. Mesolithic people were also hunters and gatherers, although they also fished in many places. There are very few people living as hunters and gatherers in the world today. Farming developed during the Neolithic, or New Stone, Age.

The Stone Age came to an end when metal tools and ornamentation became widely used. Old World cultures were most affected by this development. The **Bronze Age** followed the Stone Age because bronze tools and weapons were sturdier than those made of stone. The Iron Age began as people learned to combine metals to make iron, which was even sturdier than bronze. Europeans brought iron tools and weapons to the New World. Before they had contact with Europeans, American Indians used tools made primarily of stone. In Montana, stone tools were used through the 1800s. However, once contact was established with the eastern United States, American Indians placed a high value

on metal tools and equipment and used them regularly.

Through the hundreds of thousands of years of Stone Age living, ancient humans migrated to most areas of the world. All over the world, cultures rose, developed, and disappeared over time. Those people who were able to adapt survived. Humans had to adapt to changes during the Ice Age in their natural and social environments. The ancient cultures that were unable to make the necessary modifications did not last.

Cultures in various parts of the world developed at different rates and in different directions. The abilities to grow crops and domesticate animals—as sources of food—and to manufacture tools out of metal indicated that a culture was developing economically. With the passing of the Stone Age, most people became less nomadic and they settled permanently in villages. A society became a civilization when it developed social beliefs, class position, and rank and its people settled in cities. Industry and trade with other cultures signified further growth within a civilization. Wars with opposing societies often altered civilizations. Cultures continue to develop and change today.

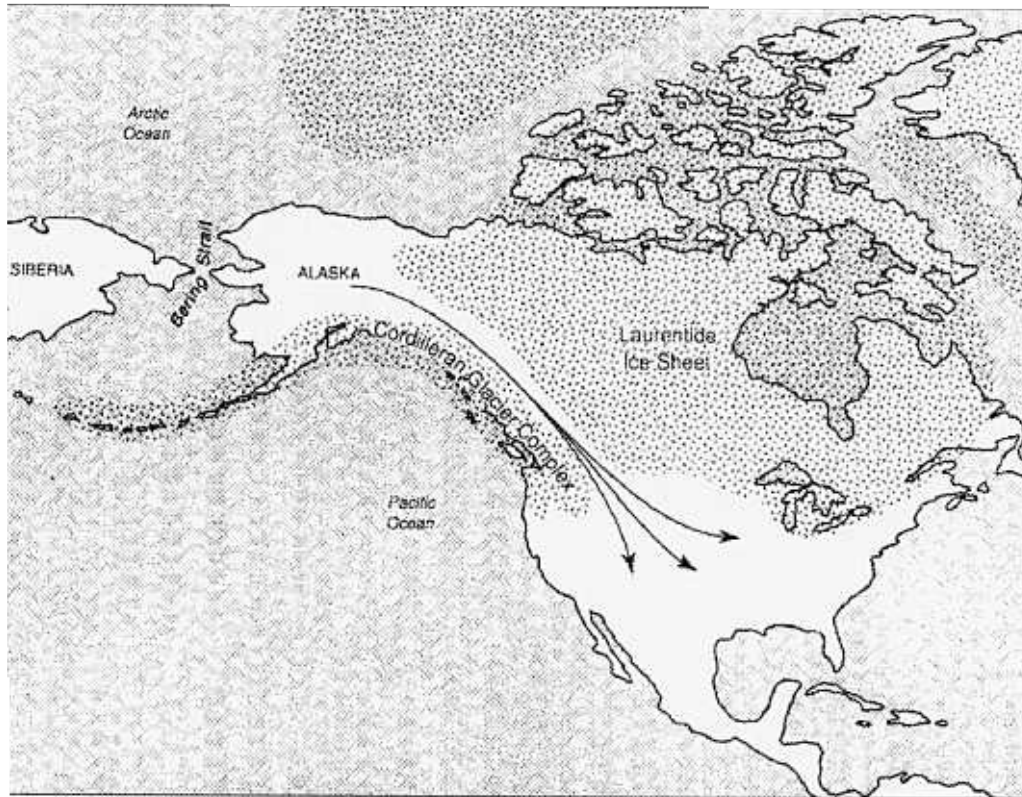
Archaeologists study archaeological sites to develop theories about the ancient travel routes to North America. Many archaeologists believe that the first humans migrated from northeastern Asia to the New World during the last Ice Age, when ocean levels were lower. Over the years, people then migrated all the way to the tip of South America. An opposing theory states that people arrived first in South

America and then walked north. Yet another theory argues that the first people here came along the coasts of Greenland and Iceland. Ocean currents, according to this theory, offered highways to the New World in any season. An alternative boat theory states that the first people in North America arrived from Australia and the Pacific Islands. Future archaeological discoveries and methods may lead to new interpretations of arrival or, or more likely, prove a theory that already exists.

For many archaeologists, the **Bering Land Bridge** theory has merit. It states that ancient people walked from **Siberia**, in northeastern Asia, to what is now Alaska. This would have been possible thousands of years ago during the **Ice Ages**. The geological record shows that, during periods of cold and increased snowfall, much of the earth's water was captured in huge ice sheets and glaciers. As the water froze on land, sea levels dropped dramatically, exposing a wide strip of land connecting Asia and North America. Called **Beringia**, this land bridge would disappear as water rose during warmer periods.

Geologists believe that Beringia was exposed for travel at different times, around 38,000 BC, 26,000 BC, and 11,000 BC. These intervals would have allowed animals and humans to migrate from one continent to another, in either direction. Animal fossils provide the proof of a migratory route between the two continents. Ancient camels and horses originated on our continent and migrated to Asia, leaving only fossils in North America. Ancient animals that migrated east

During the last Ice Age, there was a land bridge across the Bering Strait, between Siberia and Alaska. Archaeologists believe that some of the first humans came to North America across this land bridge and then passed down through an ice-free corridor between the glacial ice sheets. Recent evidence suggests that other routes into North America also existed. *Courtesy Montana Historical Society.*



from Asia included fox, wolf, bison, deer, bear, yak, and elephant. Traffic was definitely two-way on the Bering Land Bridge.

Beringia is submerged today, with North America and Asia separated by only fifty-six miles of shallow ocean. During the Ice Ages, Beringia was an immense stretch of land, stretching hundreds of miles wide north to south. Ancient people may not have even been aware that they were migrating to a new continent. More than likely, they were traveling in search of food as the seasons changed. They were probably following herds of animals grazing across the land. Other food sources, such as plants, also encouraged people to migrate. And weather conditions may have forced people eastward as ice sheets moved into Siberia. There may also have been too many people for the land to sustain. A

combination of these circumstances most likely led to the migration across the land bridge.

Ancient people living in the northern latitudes were well adapted to a climate of cold and ice. Few trees grew on Beringia. It was an immense grassland. The peoples' shelters were huts made of branches or bones and animal skins. They carried their belongings as they migrated. They traveled in small bands, or family groups, and subsisted as hunters and gatherers. They caught fish in lakes and along the seashores. They may have traveled along the shorelines in small boats made of animal skins. They probably traveled most during the warmer seasons, but sometimes they even traveled when the land was covered with winter's snow and ice.

This migration route across the Bering Land Bridge existed only during

the coldest part of the glacial periods. During most of the glacial period and especially during interglacials, the ice melted and Beringia was again covered by the sea. The pathway from the continent of origin was closed, and the people and land mammals who had crossed the bridge from Asia became North American residents.

Once on this continent, the people are believed to have eventually traveled south, but archaeologists are not sure which way they went. At that time, large parts of Alaska were relatively free of glaciation, but huge ice sheets covered much of Canada and the northern United States, blocking the way to the south. Most archaeologists believe that seasonal warming periods melted the edges of the glaciers and created ice-free **corridors**, or paths, allowing the people to migrate between the mountains and the plains. The routes varied, depending on each season's weather; but the people probably used high plateaus extensively, negotiating their way on foot through mountain passes.

Another route to the south may have hugged the shoreline of the Pacific Coast. During the glacial periods, when ocean levels were lower, the beaches and coastal plain were much wider than are those today. Unfortunately, if early people did travel along this glacial shoreline, their campsites are today under the ocean and difficult for archaeologists to find and study, if they are preserved at all.

Families may have lived in the cold north country for long periods of time, or they may have hurried south as quickly as possible. The distance from the land bridge to the tip of South

America is 11,000 miles. In studying artifacts and sites in South America, archaeologists have determined that some of these are very old—and possibly even older than those in North America! Further study of South American sites will provide additional clues to the original migration into the New World and about early life in North America.

Archaeologists study remnants of ancient trails through Montana for clues to the past movements of people. The **Old North Trail** is one such trail. Some believe this trail, or system of trails, may have been used as long as 10,000 years ago, when Montana's early travelers walked through the ice-free corridor. The path follows the eastern edge of the Rocky Mountains, or the **Rocky Mountain Front**. At the front, the Great Plains extended eastward and mountains bordered the west. Along the Old North Trail, early peoples could find shelter, wood, water, and plant and animal food sources. Historians and prehistorians have studied remnants of ancient trails along the Rocky Mountain Front that wind across streams and through gullies and traverse ridges or go around buttes. These scientists have found hunting drive lines and tipi rings near and along these trails. Ruts still preserved in the dirt may indicate that some early travelers used a **travois**, a framework of poles used to carry belongings behind dogs or horses. Rock **cairns**, or stones intentionally stacked as landmarks and symbols, occur along the route.

The Old North Trail could be the oldest and longest on our continent. A variety of other main trails probably

existed, as did smaller secondary and tertiary trails. These ancient routes connected North America long ago, much as highways do today. Families, individuals, and groups of people traveled the trails for a variety of purposes: to visit relatives, war with enemy tribes, and embark on sacred missions. Other travelers transported trade goods between different areas of the country, carrying Yellowstone's obsidian to the Ohio River, for example.

No matter which origin and travel theory proves most true, the fact is that North America (as well as Central and South America) was already inhabited by large numbers of people when

European explorers and immigrants arrived. At least six hundred separate tribes of people lived in North America at that time. They prevailed in a variety of climates and conditions, from deserts to woodlands and from plains to the arctic. These peoples exhibited great diversity in their physical appearances and lifeways. Each tribe had its own traditions, tools, houses, and languages. Even today, the different tribes have their own stories of creation and accounts of where they come from. These different tribes of "Indians" (mistakenly labeled as such by an early explorer who thought he had reached India) represent the first inhabitants of Montana.

LESSON 2C—NARRATIVE 2: FIRST PEOPLE—NATIVE AMERICAN ORAL TRADITIONS AND ARCHAEOLOGY

The following texts are by Native Americans. The first is by Roger Echo-Hawk, a Native American, about archaeological and native oral traditions regarding the first people in the New World. The second is a Kootenai creation story.

ANCIENT WORLDS

by Roger Echo-Hawk

The first people dwelt in a land of lingering darkness. In some Native American origin stories, humans emerged from this region to witness the sun's creation or the ordering of night and day. Thousands of years later, many Indians said that their ancestors entered the world from a dark place located underground. Other oral traditions, however—told in both Asia and America—describe the creation of earth from a watery world, and these stories do not typically associate darkness with the first people.

Many archaeologists believe that humans from Asia entered North America more than 11,000 years ago. As Ice Age glaciers absorbed water, sea levels fell hundreds of feet and "Beringia" appeared in the far north, linking Asia to Alaska. Some of the oldest human sites in eastern Beringia can be found above the Arctic Circle, where darkness lingers over the earth. Other scholars believe that humans followed the coastlines of Beringia by boat into the Americas—a route which does not pass through the Arctic Circle.

Climatologists believe that the Ice Ages were swept by windstorms of

much greater power than present-day hurricanes and tornadoes, and in one Indian tradition, the first people were created in the heavens and placed on earth by tornadoes. Other Indian stories say that the climate underwent a swift change when the animals (who reigned over the earth) caused summer to appear. Paleoclimatologists have found that a very sudden global warming event occurred 11,700 years ago at the end of the Ice Age. This date coincides with the earliest accepted archaeological evidence for the presence of humans in Alaska.

Many Native American oral traditions refer to the existence of dangerous "monsters" and giant animals in ancient times, and other stories are set in a period when animals and birds ruled the world. Paleontologists describe Ice Age America as a realm dominated by giant animals, or "megafauna." Mammoths, mastodons, and giant sloths towered over human hunters; and fearsome short-faced bears, great cats, and other creatures could have made the New World a dangerous place for unwary people.

In many Indian traditions, a great flood covered the earth in ancient times, and some stories associate this event with the end of the age of monsters. Traditions of a mighty deluge can be found in oral and written literatures from around the world. The end of the most recent Ice age, some 12,000 years ago, could have involved cataclysmic flooding. As the glaciers slowly melted, for

example, the sudden release of a massive ice sheet into the ocean would have brought worldwide flooding. The end of the Ice Age also coincides with the extinction of many species of megafauna around the world.

The first Americans made artifacts and left sites which archaeologists can study for insights into the distant past. The ancient ancestors of modern Native Americans also created verbal documents about their experiences, and successive generations of Indians heard these stories as accounts of actual, not fictional, historical events. If Native American origin traditions shed light on the lifeways of people who settled in North America during the last Ice Age, then Indian literature preserves a remarkable legacy of documents about ancient human history in the New World." (From: *Ancient Worlds*, Society for American Archaeology Bulletin, Volume 11, Number 4, 1993).

A VISIT TO THE SKY WORLD

(A Kootenai Creation Story)

Among the Old People (the animal people), Muskrat was considered to be a sneaky character. When his brother died, Muskrat wanted to marry his sister-in-law. She refused him. In his anger he shot her with an arrow that could not be identified by his people. When friends came to investigate the murder, Muskrat cleverly told them that the arrow had come from the sky.

The earth people were convinced that the Sky people had killed the woman and they were determined to go to the sky to make war on the Sky

people. The Earth People shot an arrow up into a cloud and when it stuck they shot a series of arrows, each into the notch of the arrow ahead of it, until they had formed a chain of arrows all the way down to the ground. Then the Earth People began to climb up into the sky.

Wolverine, who had wanted to go on the raid, was left behind. In his anger he jerked the chain of arrows down from the sky so that the earth people would not be able to climb down. When the arrows fell to the ground, they formed a chain of mountains to the south of Kootenay Lake.

When he reached the sky, Muskrat ran ahead of the others and constructed a large lake with many tipis around it. After the rest of the Earth People arrived, they searched the village for their enemies but were only able to find Muskrat in hiding. They killed him and returned to make their way back to the ground only to find that the arrow chain was gone. They went in search of Thunderbird who lived in the clouds. They captured him and plucked his feathers. Then they glued the feathers to their bodies and flew down to the ground. Woodpecker, his brothers and sister, and his cousin Flicker decided to stay up in the sky and explore a little. They walked until they reached the place where the Earth meets the sky. There they sat down on the shore of a large lake to rest. As they sat, a huge wave rolled up on the shore and poor Flicker was swallowed by Water Monster.

Woodpecker and his siblings ran from bay to bay and danced until the fish came to see what was happening. Woodpecker asked them to help locate Water Monster so that he could save his cousin Flicker. The fish were only too happy to help.

When they finally located Water Monster, Woodpecker tried to kick the monster but his foot only struck a glancing blow. He and his brothers chased Water Monster all the way up the Kootenay River and then back to the south along Lake Windermere. At Longwater Bay the monster dug an underwater cave and hid from the woodpeckers.

Just about then, the woodpeckers saw Old Grandfather Creator of the Kootenais crawling up from the south and naming all the places as he went. As he crawled he left scratch marks on the land and rivers flowed in the furrows left by his belly. "Quickly! Make a dam at the end of the lake to trap Water Monster," Woodpecker called to him.

Always obliging, Old Grandfather

broke off a chunk of mountain, formed it with his knees, and created a portage between the Kootenay and Columbia Rivers. Woodpecker was able to corner the Water Monster until the rest of the Earth People came to help him slay the monster. They cut him open and out flew Flicker, a little thinner and weaker but still alive.

The animals cut the monster into pieces. They threw his ribs into the river where they formed cliffs. Then the animals dug hot springs around the area and cooked the blood and body parts until they were well done. The animals threw the parts around the land to become food for the New People.

(From Work House, Native American Environmental and Heritage Education Program, 1993)

LESSON 2C—VOCABULARY: HOW DID HUMANS ARRIVE IN NORTH AMERICA?

anthropology _____

Bering Land Bridge _____

Beringia _____

Bronze Age _____

cairns _____

corridor _____

era _____

Homo sapiens _____

hunters and gatherers _____

Ice Ages _____

immigrated _____

Iron Age _____

Mesolithic _____

migration _____

Neolithic _____

Old North Trail _____

Paleolithic _____

LESSON 2C—VOCABULARY: HOW DID HUMANS ARRIVE IN NORTH AMERICA? (CONTINUED)

primary documents _____

Rocky Mountain Front _____

Siberia _____

Stone Age _____

travois _____

LESSON 2C—ARCH ACTIVITY: HUMANS ON EARTH

Grades: 4–8

Time: 20 minutes

Content Area: history, math, writing, and science

Who: whole group and individual

Materials:

yardstick

Arch Journal

OBJECTIVE AND OUTCOME

- Students will learn that humans have inhabited Earth for a relatively short time, as compared to the geologic time scale.
- Students will estimate the distance on a yardstick they believe humans have inhabited earth. They will write sentences comparing that time with the geologic time scale.

ACTIVITY

1. Show the students a yardstick and explain that it represents all of geologic time. Instruct students to estimate on the yardstick the length they believe represents the time humans have lived on Earth, according to scientific theory.

2. Instruct students to write their estimations in their Arch Journals.

3. Inform the students that, according to the geologic time scale, the amount of time humans have actually inhabited Earth measures less than 1/16" on the yardstick. (Teachers: If Earth is estimated to be 4,600 million years old, then one inch equals about 127 million years. According to human paleontologists, humans are less than eight million years old, or less than 1/16".)

4. Instruct students to write sentences comparing their estimations with the actual measurement.

EXTENSIONS

3–8:

- Research the human past according to evolutionary theory.
- Research Native American creation stories for Montana tribes.
- Write a creation story.
- Research the history of calendars and different cultural measures of time.

See: Extension Resources—Exploring Time